Artificial Intelligence Policy

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The call for AI Policy

- **Yesterday, at a hearing on AI Policy in Senate Judiciary committee:**
  - Sen. Blumenthal set out three AI guardrails – transparency, accountability, and limitations on AI use – to anchor the discussion.
  - OpenAI CEO Sam Altman (ChatGPT creator) acknowledged growing risks of AI, warning Congress that AI could "cause significant harm to the world" and **extensive regulation & a government oversight agency** is urgently needed.
  - Prof. Gary Marcus proposed an **oversight agency** modeled on the FDA, with scientists and sufficient resources, at the cabinet level.
  - Witnesses proposed **impact assessments**, **safety** standards, **transparency** requirements, **privacy** rules, and **limits** on AI capabilities.

The Center for AI and Digital Policy

Our work at the Center for AI and Digital Policy includes:

1. creating annual **assessment and index** of AI policy in 75 countries;
2. delivering **AI policy clinics** to 400+ policy leaders in 60 countries;
3. providing **policy consultation** to US Congress, the European Union Parliament and Commission, and serving as **expert advisors** to the OECD, UNESCO, the G7-G20 and the Council of Europe; and
4. producing **statements** and comments to int'l govts and orgs; publish a **weekly AI Policy Update** to a subscriber base of 40,000; hosted policy **summits**, **roundtables**, and **panels**, w/AI experts around the world

Center for AI and Digital Policy

Major AI Policy Frameworks: *Universal Guidelines for AI*

Major AI Policy Frameworks: *White House Blueprint for AI Bill of Rights*

- **The AI Bill of Rights framework** provides a national values statement to inform policy, practice, and the design of AI, and articulates the expectation that AI systems will be safe, fair, transparent, just, and respectful of individual privacy.
- **The five principles include:**
  1. Safe and Effective Systems;
  2. Data Privacy;
  3. Algorithmic Discrimination Protections (*fairness*);
  4. Notice and Explanation (*transparency*); and
  5. Human Alternatives, consideration, & fallback (*accountability*).

Major AI Policy Frameworks: *Technical Standards and Measures*

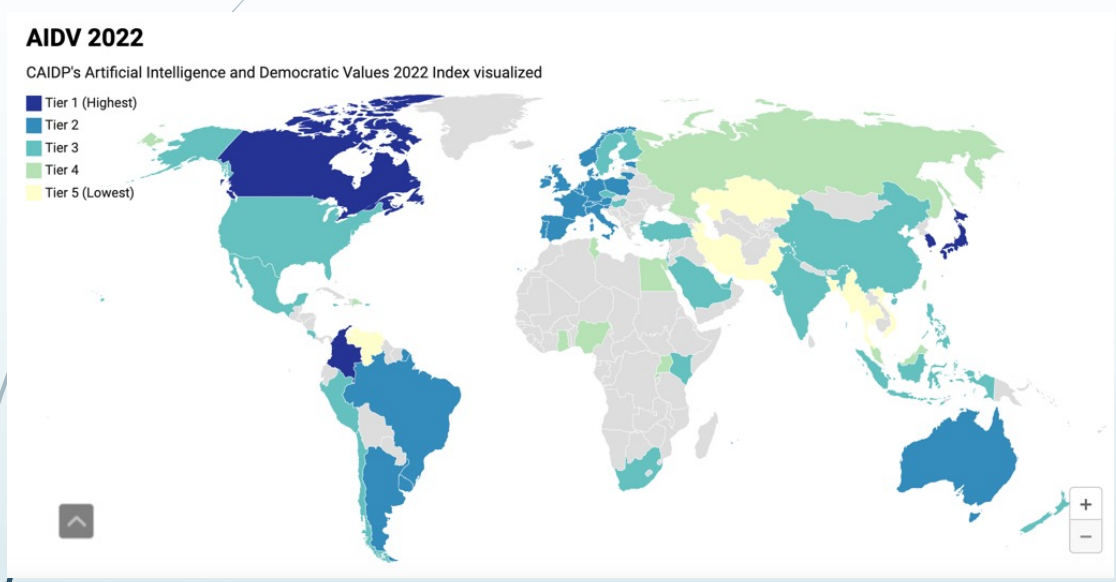
NIST

- **NIST AI Risk Mngmt Framework**
- set of resources for organizations to manage security, privacy, and bias risks in AI systems.
- includes definitions, measures, risk assessment and monitoring tools that can be incorporated throughout the life cycle of AI system development.

IEEE

- P7000 series of technical standards for ethical AI
- Standards for the organizational governance of AI

Global Policy Development:
AI & Democratic Values Index



Global Policy Development:
AI & Democratic Values Index

Major recommendations for countries:

1) establish national policies for AI that implement democratic values;
2) ensure public participation in AI policymaking and robust mechanisms for independent oversight of AI systems;
3) guarantee fairness, accountability, and transparency in all AI systems;
4) commit to these principles in the development, procurement, and implementation of AI systems for public services;
5) halt the use of facial recognition for mass surveillance;
6) curtail the deployment of lethal autonomous weapons;
7) begin implementation of the UNESCO AI Recommendation; and
8) establish a comprehensive, legally binding convention for AI.

Challenges in AI Policy Development

Essential elements for AI policy frameworks:

1. Develop a rights-based framework
2. Ground the framework in a set of clear values and principles
3. Draw from expert AI knowledge (incl. computer sci, social sci, and ethics)
4. Reference technical standards including impact and risk assessment tools
5. Implement clear guardrails on the deployment of high-risk systems
6. Consider redline prohibitions for systems which are invalid (e.g., biometric categorization, emotion analysis, predictive policing) or oppressive (e.g., biometric surveillance, scoring)
7. Create an independent regulation and oversight body
8. Include meaningful public input and stakeholder engagement

On Fairness

ACM 2017 Statement on Algorithmic Transparency & Accountability

- "owners, designers, builders, users, and other stakeholders of analytic systems should be aware of the possible biases involved in their design, implementation, and use and the potential harm that biases can cause to individuals and society."
- "the use of algorithms for automated decision-making about individuals can result in harmful discrimination. Policymakers should hold institutions using analytics to the same standards as institutions where humans have traditionally made decisions and developers should plan and architect analytical systems to adhere to those standards when algorithms are used to make automated decisions or as input to decisions made by people."

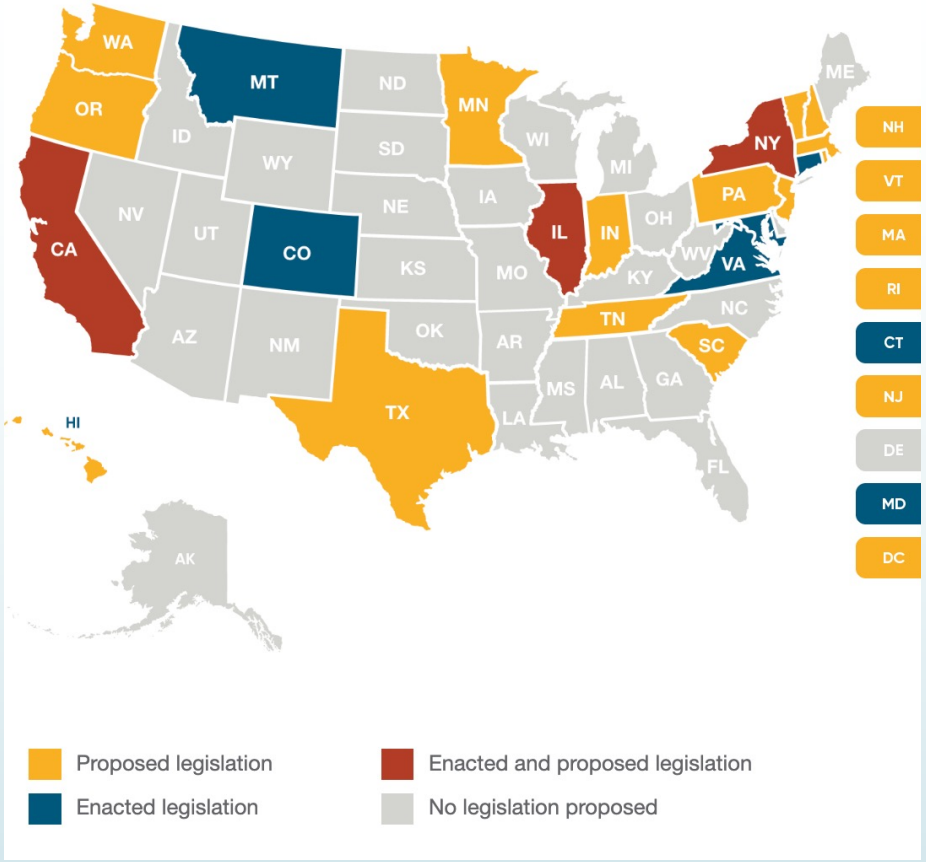
On Accountability

- **OECD AI Principles:** "accountability refers to the expectation that organizations or individuals will ensure the proper functioning, throughout their lifecycle, of the AI systems that they design, develop, operate or deploy, in accordance with their roles and applicable regulatory frameworks, and for demonstrating this through their actions and decision-making process (for example, by providing documentation on key decisions throughout the AI system lifecycle or conducting or allowing auditing where justified)."
- **ACM 2022 Statement on Responsible AI Systems:** "Public and private bodies should be held accountable for decisions made by algorithms they use, even if it is not feasible to explain in detail how those algorithms produced their results. Such bodies should be responsible for entire systems as deployed in their specific contexts, not just for the individual parts that make up a given system. When problems in automated systems are detected, organizations responsible for deploying those systems should document the specific actions that they will take to remediate the problem and under what circumstances the use of such technologies should be suspended or terminated."

State-level AI legislation

Connecticut legislation passed:

- focus on essential governance elements to minimize harms impacting civil rights, civil liberties, and privacy.
- provides roadmap and model for other states, with sections on:
  - AI governance **roles** (oversight board, officers);
  - AI governance **policies** (safeguards, responsible data use, and inventory); and
  - AI governance **processes** (safety, authorization, procurement, and inventory).



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